Un-manned Satellites on Postage Stamps : 19

By Guest Contributors Don Hillger and Garry Toth

Pioneer-series (non-planetary) Missions

This is the nineteenth in a series of articles about un-manned satellites on postage stamps. This article features the earlier non-planetary part of the **Pioneer**-series of satellites. The later planetary Pioneers will be featured in a future article.

Ten numbered non-planetary Pioneer satellites were launched. The first, Pioneer-0, was attempted in the same year as Explorer-1 (1958) but failed. Pioneer-1 and 2 also failed, but were still numbered in sequence. Other subsequent Pioneer-series launch failures were not numbered, as it became common practice to delay numbering until a launch was known to be successful. The last of the non-planetary Pioneers, Pioneer-E, was launched in 1969, but failed, and so remained un-numbered. The last successful non-planetary Pioneer was Pioneer-9, launched in 1968.

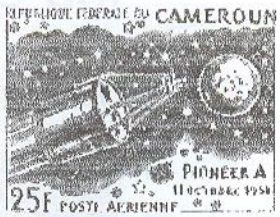
The non-planetary Pioneers, (Pioneer-0 through Pioneer-E), were primarily lunar, solar, and interplanetary spacecraft. The planetary Pioneers came later: numbered Pioneer-10 through Pioneer-13, they were for exploration of the planets, including specific missions of two Pioneers to Jupiter/Saturn, and two Pioneers to Venus. The accompanying checklist does not include the planetary Pioneers. Only the earlier non-planetary Pioneer missions are included.

Pioneer-0, 1, and 2 were the first U.S. lunar attempts, but all failed. They were followed by Pioneer-3 and 4 as the first successful U.S. lunar missions.

Pioneer 3 and 4—the first successful US lunar missions

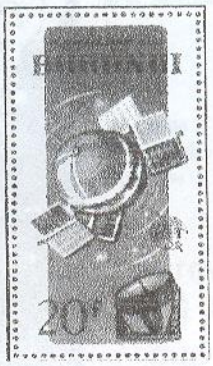
Pioneer-5 provided the first maps of the interplanetary magnetic field.

Pioneer-6, 7, 8, and 9 were the world's first solar monitoring network, to provide warnings of increased solar activity: high levels of solar activity can affect orbiting satellites as well as ground-based electrical systems.



Pioneer-6, 7, 8, and 9 were the world's first solar monitoring network

Pioneer-5 (Burundi) is notable philatelically because it was nearly identical to Explorer-6. (Congo)



The non-planetary Pioneers are featured on a large number of postal items. In many cases the images are small, but identifiable. In a few cases the images are larger and contain some detail of the spacecraft. Pioneer-5 is notable philatelically because it was nearly identical to Explorer-6. Both were "paddlewheel" satellites in appearance, and both are featured on several postal items. Through examining reference images as well as images on covers and postal items, the authors discovered that Explorer-6 contained two short antennas on its "top", whereas Pioneer-5 contained only a single short antenna. This difference, though not documented elsewhere to the authors' knowledge, was a key to differentiating between the two satellites when the Explorer or Pioneer names were not specifically given on postal items.

Fujeira issue showing Pioneer 5

A checklist of postal items showing the non-planetary Pioneer series satellites (http://www.cira.colostate.edu/ramm/hillger/Pioneer.htm) is available on the Website developed by the authors for the un-manned satellites featured in this series of articles (http://www.cira.colostate.edu/ramm/hillger/satellites.htm). E-mail correspondence is welcome. Don Hillger can be reached at hillger@cira.colostate.edu and Garry Toth at garry_toth@hotmail.com.

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Pioneer-series satellites
(non-planetary: Pioneer-0 thru Pioneer-E)

Below is a checklist of **Pioneer-series (non-planetary) satellite** postal items (stamps, souvenir sheets, aerogrammes, postal cards, etc.). Catalog numbers, years of issue, and notes on the satellites featured are given when available. If readers know of additional information or images, please contact the authors using the e-mail addresses at the bottom of this page.

The first part of the Pioneer series, Pioneer-0 thru Pioneer-E (which failed), were primarily lunar, solar, and interplanetary satellites. **Only these earlier/non-planetary Pioneer missions** are included here. The later part of the series, Pioneer-10 thru Pioneer-13, were for exploration of the planets, including specific missions of two Pioneers to Jupiter/Saturn and two Pioneers to Venus. Those later/planetary Pioneers are not covered on this page. For a list of non-planetary Pioneers see the **Pioneer-series table** on the scientific/research satellites page.

Country	Catalog Number*	Type of Item**	Year of Issue	Notes on Content
Belgium	None	In margin of cinderella of 2 imperforates	196?	Pioneer-5[4]
Bhutan	406	SS1	1984	Pioneer-5[4]
Bhutan	407	SS1	1984	Pioneer-5[4]
Burundi	133		1965	Pioneer-5[4]
Burundi	133a	On stamp and in margin of perforate and imperforate SS2 (131+133)	1965	Pioneer-5[4]
Cameroun	C84		1967	Pioneer-6 (Pioneer-A) with folded antennas, date for Pioneer-1
Cuba	1800		1973	Pioneer-3/4[2]
Fujeira	Mi70		1966	Pioneer-5[4]
Fujeira	Mi149	Mi70 overprinted new currency	1967	Pioneer-5[4]
Fujeira	Mi348	Mi70 overprinted "Apollo-8"	1969	Pioneer-5[4]
Ghana	164		1964	Pioneer-0/1/2[1]
Ghana	165		1964	Pioneer-0/1/2[1]
Ghana	166		1964	Pioneer-0/1/2[1]
Ghana	166a	On stamp and in margin of imperforate SS4 (4x (166))	1964	Pioneer-0/1/2[1], Pioneer-5[4]
Ghana	186		1964	Pioneer-0/1/2[1]
Ghana	186a	MS12 (12x (186))	1964	Pioneer-0/1/2[1]
Ghana	187		1964	Pioneer-0/1/2[1]
Ghana	187a	MS12 (12x (187))	1964	Pioneer-0/1/2[1]
Ghana	188		1964	Pioneer-0/1/2[1]
Ghana	188a	MS12 (12x (186))	1964	Pioneer-0/1/2[1]
Haiti	m1310 (Y723)*		1973	Pioneer-6/7/8/9[3] with folded antennas
Haiti	m1369*	m1310 overprinted	1974	Pioneer-6/7/8/9[3] with folded antennas
Mongolia	C6		1965	Pioneer-5[4]
Montserrat	891	In margin of SS1	1996	Pioneer-5[4]
Nigeria	143a	In margin of MS12 (12x (143))	1963	Pioneer-0/1/2[1]
Nigeria	144a	In margin of MS12 (12x (144))	1963	Pioneer-0/1/2[1]
Panama	C334a (BL36) iC334a (BL37)	In margin of SS2 (C333-C334) (changed colors on imperforate)	1965	Pioneer-0/1/2[1]
Panama	C336a iC336a	In margin / margin of SS2 (C335-C336) (changed colors on imperforate)	1965	Pioneer-0/1/2[1]
Paraguay	922 (Mi1522) i922 (Mi1530)	Changed colors on imperforate	1966	Pioneer-0/1/2[1]
Paraguay	926 (Mi1526) i926 (Mi1534)	Changed colors on imperforate	1966	Pioneer-0/1/2[1]
Paraguay	926a (BL79) i926a (BL80)	SS1 (926) (changed colors on imperforate)	1966	Pioneer-0/1/2[1]
Qatar	448		1975	Pioneer-5[4]
Rwanda	136	SS2 (136a-b)	1965	Pioneer-0/1/2[1]
Sharjah	44		1964	Pioneer-5[4]
Sharjah	44A	44 overprinted new currency	1967	Pioneer-5[4]
Sharjah	48b	Imperforate SS1	1964	Pioneer-5[4]
Sharjah	Mi1000		1972	Pioneer-3/4[2]
United States	None	Cachet on Explorer-S66 launch cover	1964	Pioneer-0/1/2[1], Pioneer-5
United States	1556 fdc	Cachet on FDC	1975	Pioneer-1 thru Pioneer-9
Yemen Arab Republic	Mi921 Mi928	Perforate and imperforate. Changed colors on imperforate	1969	Pioneer-4, Pioneer-5[4]

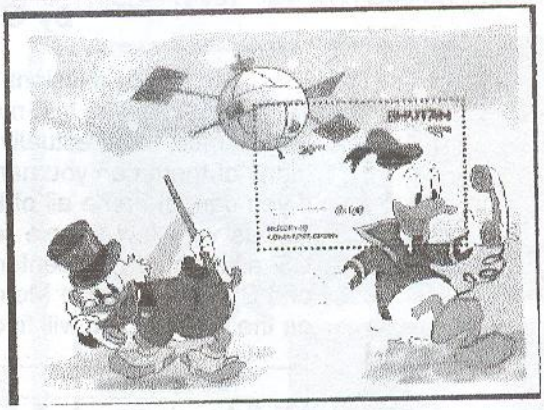
Scott catalog number, unless prefixed with Mi or BL for *Michel*, or m for *Minkus*, or Y for *Yvert*; "i" prefix denotes imperforate version.

**FDC = first day cover; SS# = souvenir sheet, MS# = miniature sheet, where # = number of stamps in sheet, and the numbers in parentheses are the catalog numbers of the stamps in the sheet.

[1]Pioneer-0, 1, and 2 are all basically identical.

[2]Pioneer-3 and 4 are basically identical.

[3]Pioneer-6, 7, 8, and 9 are all basically identical.

[4]Both Explorer-6 and Pioneer-5 were "paddlewheel" satellites. It is believed that Explorer-6 contained two short antennas on its "top", whereas Pioneer-5 contained only a single short antenna.

Checklist of Postal Items Showing the early Pioneers